Date: Mon, 31 May 93 04:30:01 PDT
From: Packet-Radio Mailing List and Newsgroup <packet-radio@ucsd.edu>
Errors-To: Packet-Radio-Errors@UCSD.Edu
Reply-To: Packet-Radio@UCSD.Edu
Precedence: Bulk
Subject: Packet-Radio Digest V93 #151
To: packet-radio

Packet-Radio Digest Mon, 31 May 93 Volume 93 : Issue 151

Today's Topics:

Send Replies or notes for publication to: <Packet-Radio@UCSD.Edu>
Send subscription requests to: <Packet-Radio-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Packet-Radio Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/packet-radio".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 30 May 93 14:43:05 GMT
From: usc!howland.reston.ans.net!spool.mu.edu!sgiblab!nec-gw!nec-tyo!wnoc-tyo-news!glocom!tyo-noc-news!jh1ynw!marina!kohjin@network.UCSD.EDU
Subject: artwork for uwave link
To: packet-radio@ucsd.edu

In article <C7L66L.3s4@srgenprp.sr.hp.com> glenne@sr.hp.com (Glenn Elmore) writes:
   :
   : Some files pertaining to the "Inexpensive Multi-megabaud Microwave
   :Data Link" first shown in Ham Radio magazine and now also in the ARRL
   :Handbook are available by anonymous ftp on col.hp.com under packet/n6gn.
   :There is an associated README file.

I've downloaded them all and uploaded to KO-23.
It appears that pcb.zip is corrupted;

```
   kohjin@cosmos 146% unzip -v pcb.zip
   Length  Method   Size  Ratio   Date    Time   CRC-32    Name
   ------  ------   ----- -----   ----    ----   ------    ----
   375135           46926  87%  04-27-93  10:16  a6212d4b  XCVR.PLT
   177123           48593  73%  04-27-93  13:50  22f5a1d2  RCVR-PRT.PLT
   Invalid Zipfile Header
```

Is this my ftp or some thing else wrong?
It's same in DOS's PKUNZIP too.
I've converted the associated Postscript to GIF files and uploaded to KO-23 too.
The problem has been reported by one of the users in the bird.

```
   :
   :  Artwork made available by Jon Bloom, ke3z, after work by John Conner,
   :wd0fhg, is there in postscipt and HPGL forms.  This artwork appears
   :sufficient to build simple boards for both the transceiver (RF) and
   :receiver boards.  I personally built up one set from an earlier revision
   :which worked after some minor modifications.  I believe, but am not
   :certain, that some of these modifications have been included in the
   :available artwork.
```

Appreciate if it's available by anymeans.

```
   :  I do have schematics but presently I have no board designs for a
   :TTL <=   : ECL interface for these radios which currently have a pinout and
   :ECL interface similar to an Ethernet media access unit.  If interested
   :in this you may email for details to glenne@sr.hp.com.
   :
   :
   :Glenn Elmore n6gn
```

Wish we could use Ethernet Card rather tahn PCLANA Card.

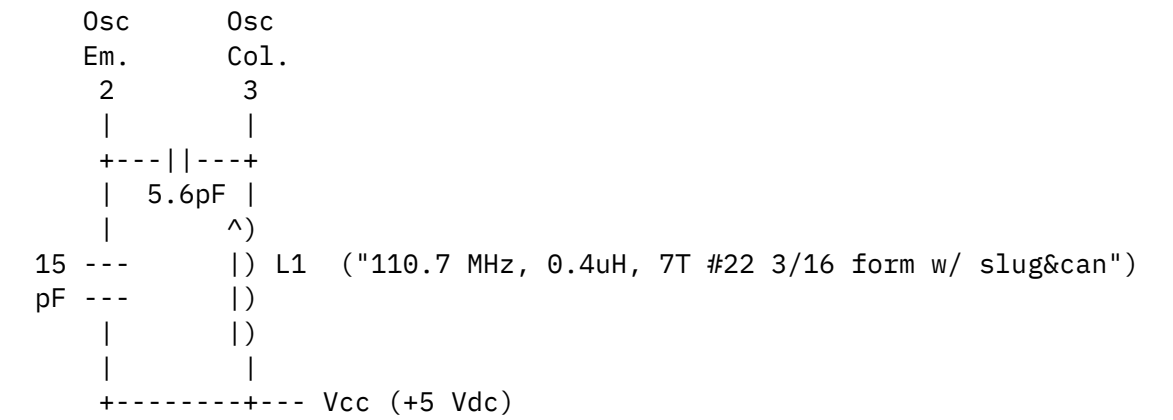
Keep a good job in your Spread Spectrum work!
73, Kohjin
--


```
    *----/----*    Kohjin Yamada, JR1EDE   [kohjin@marina.prug.or.jp]
  Q-----T------H   504-55 Shimo-Yamaguchi, Hayama, Miura, Kanagawa, Japan
*------/|-------*  Phone:+81-468-75-6750   Fax/Modem/Voice:+81-468-76-1176
```

Date: Sun, 30 May 1993 18:29:54 GMT
From: sdd.hp.com!apollo.hp.com!cupnews0.cup.hp.com!news1.boi.hp.com!hp-pcd!hp-vcd!
egurney@network.UCSD.EDU
Subject: FSK encoding and decoding in the VHF band
To: packet-radio@ucsd.edu

In article <C7r7zL.Iuo@vcd.hp.com> I wrote:
>The Motorola MC3356 "Wideband FSK Receiver" appears to be exactly
>what I'm looking for, except that the "test circuits" and "sample
>applications" in the data sheet are for an FSK signal transmitted
>at 100 MHz.

To explain a little better, the MC3356 has a Colpitts type oscillator which connects to an internal mixer (to mix the oscillator with the RF input). Pin 2 is the "OSC Emitter", pin 3 is the "OSC Collector". In the test circuit (set to operate at 100 MHz), Motorola shows the following components:



What frequency does this combination of two capacitors and an inductor oscillate at? (I assume 110.7 MHz, which is 100 MHz + the 10.7 MHz IF?)

Now the $25,000 question: How do I choose the appropriate component values to operate the oscillator at a DIFFERENT frequency?

I can't seem to get the "resonant frequency" calculation to come out right for the example. [f = 1 / 2*Pi*SqRt(L*C)] What am I missing?

Any help would be greatly appreciated!

Thanks and regards,
Ed

--
Ed J. Gurney N8FPW Hewlett-Packard Company Vancouver (USA!) Division
egurney@vcd.hp.com #include <standard-disclaimer.h>
"Failures are divided into two classes-- those who thought and never did,
and those who did and never thought." John Charles Salak

Date: Mon, 31 May 1993 07:54:36 GMT

From: psinntp!iat.holonet.net!bwilkins@uunet.uu.net
Subject: How fast is HighSpeed ?
To: packet-radio@ucsd.edu

How fast are the High Speed packet modems operating...in a reliable
connection? Are packet bbs forwarding lans operating at 56KB yet?

What kind of problems due to propagation on uhf have occured to these links?

bob

--
Bob Wilkins   n6fri   voice 440.250+ 100pl san francisco bay area
bwilkins@holonet.net   packet n6fri @ n6eeg.#nocal.ca.usa.na

Date: Sun, 30 May 1993 22:33:50 GMT
From: sdd.hp.com!spool.mu.edu!torn!newshost.uwo.ca!home-pc1.business.uwo.ca!
mark@network.UCSD.EDU
Subject: latest kpc2 rom version?
To: packet-radio@ucsd.edu

Recently I posted a message regarding: what is the latest kpc3 rom version?

My mistake, I meant to say kpc2.   Big difference! Anyways, is there an
updated version of the rom floating around for this?

I have 2.84 in the kpc2, Version 6 in my kam.

I have a modem and ftp if it is available from somewhere. I got Kam 6 off
the finish site, but I have not seen a kpc2 rom anywhere.

=-=
Mark Bramwell, VE3PZR   Located in sunny London, Ontario

Internet: Mark@ARDSLEY.business.uwo.ca IP Address: 129.100.29.33
  Packet: VE3PZR @ VE3GYQ   UWO Phone: (519) 661-3714

Date: 30 May 93 14:56:19 GMT
From: olivea!isc-br!tau-ceti!comtch!opus-ovh!bmork@ames.arpa
Subject: MiniSport Hacker - Vol 14
To: packet-radio@ucsd.edu

MiniSport Laptop Hacker - Vol 14 25 May 1993

>>> ADMIN
Things have been pretty quiet this time around. I got only one message back from the field. In the meantime, I managed to bring up an Internet node in-house, and I'll start porting these newsletters over there, too. Look in the micro.zenith and rec.radio.amateur.packet forums. If you read these MiniSport Laptop Hacker newsletters, please make it a practice of kicking back at least a one line message indicating what parts are particularly useful or not useful.

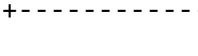
>>> POWER SUPPLY HARDWARE
Well, for those of you that have been following the MLH series, you'll know that one of my power supplies has been giving trouble. It finally gave up the ghost. Simultaneously I heard from another ham who had nearly identical symptoms: The Power & NumLock LEDs flash on for about 1/2 second and then the computer power downs by itself. From Internet, I heard from one person who bought his for a real price, with a guarantee. Its power supply died this way, also, and the seller replaced it. He's had no problems since. Too many similar stories! I wanted to know what's going on! In the meantime, I'm looking to buy broken MiniSports.

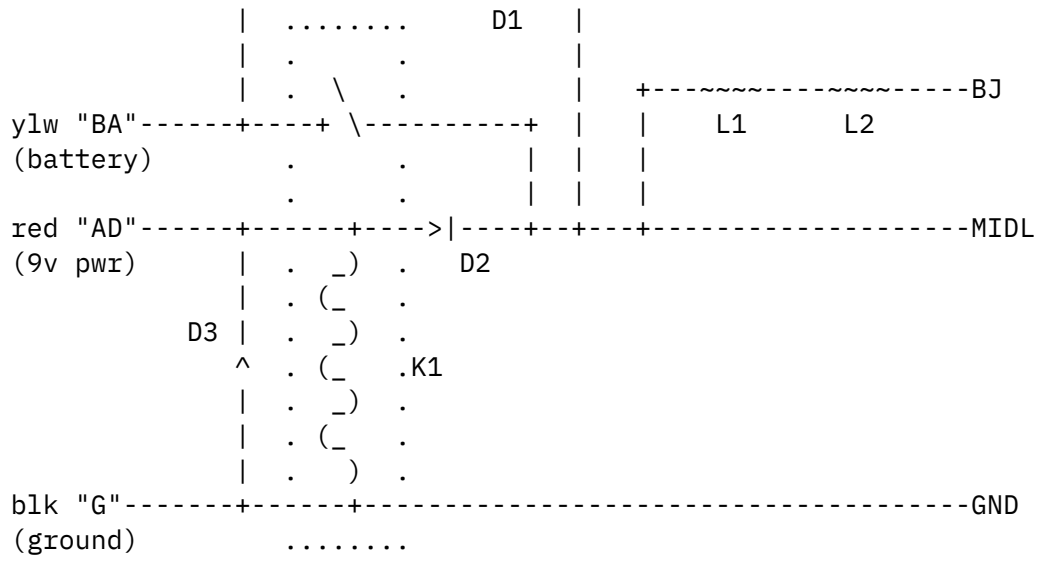
I tore mine open and started from the exterior working in. There are a handful of components that condition power and select where power is coming from --the AC adapter or the battery. This initial power supply section is documented below.

My two ZL-x computers are different:

Older	Newer
* Power supply piggyback card with number PA2020P25	* Power supply all on one card with number PA2020P65
* Motherboard 1PC1606AMB-40I with green patch wire from TP43	* Motherboard 1PC1606AMB-41I, no patchwire from/to Test Point 43.
* U47 BIOS is "BIOS V3.3D"	* U47 BIOS is "444-804"
* Disk controller WD37C65BJM has manufacture date in 22nd week of 1989.	* Disk controller is same part number dated 44nd week in 1989.

The power conditioning sections are physically different, but electrically they're the same. I expect my older one was a "fix-it" prototype that later made it onto the production board. Here's the schematic of the piggyback section:





D1,D2 - two B8300s or integral N9K-60QC04
D3 - ceramic bubble (part no. unknown)
L1 - approx 24 turns on 1/4" form
L2 - 1 turn on core
K1 - SPDT DIP relay, bottom view pinout:

```
M    AD n/c
*    *  *
|
*    *  *
GND BA
```

BJ named because the older power supply has a Blue Jumper wire.

MIDL named because it is the MIDDLE wire connecting the piggy-back board.

Operating from battery power, power comes in through D1 and out both the BJ and MIDL connections. When the 9v is available, current comes in through D2, again going out BJ and MIDL. My suspicion is that one of these carries the main power current and one is a monitor tap, i.e., indicates when AC sourced power (9v) is available. Additionally, K1 pulls the contact closed, providing current back to the battery pack for charging. If you listen carefully when 9v is connected, you can hear K1 click closed. the glass diode (D2) provides a shorted path for the current spike coming from K1 when it clicks off.

Notice that this circuit is in operation whether or not the computer is turned "on." It might be more appropriate to think of the computer as always being on; when you press the on button, the power supply just "upgrades" to full output status. The rest of the power supply (all stuff between what I presented above and the header I described back in issue ????) lives on an approximately 5"x4" circuit board. Reverse engineering of this board has been slowed by my inability to identify three chips. There are two of each of the following: MB3778 (16-pin IC), K612 (3-terminal + heat sink tab), and D4049G (16-pin IC). PLEASE FORWARD ANY INFORMATION YOU HAVE ON THESE THREE CHIPS.

73, Brian, ka9snf@wb7nnf.#spokn.wa or Internet bmork@opus-ovh.spk.wa.us

---
Brian Mork Internet bmork@opus-ovh.spk.wa.us
             Amateur Radio ka9snf@wb7nnf.#spokn.wa.usa
             USMail 6006-B Eaker, Fairchild, WA 99011

Date: Sun, 30 May 1993 22:21:43 GMT
From: usc!howland.reston.ans.net!sol.ctr.columbia.edu!deep.rsoft.bc.ca!mindlink!
a8254@network.UCSD.EDU
Subject: packet mail / internet mail
To: packet-radio@ucsd.edu

Hello:

I take care of a local area packet network in Vancouver
B.C. which consists of a hub BBS and three slave BBS's
serving some 400 users. The whole system uses FBB 5.15.

The problem we are having here is that due to number
of external realities we're getting precious few
bulletins of general interest up here. That is, the
ALLUS* and WW stuff is being edited, censored, sent to
the bit bucket before it gets to us. Efforts to find where
the blockage is have essentially failed.

What I am wondering is if there are any other FBB sysops
on the internet who could export their allus* and ww stuff
to a file, zip it, and send it to me via the internet,
perhaps twice a week.

Now I basically know squat about the internet, so if all this
sounds dumb, that's the reason. I don't know if there would be
charges involved, or what. If there were, I would, of course,
pick them up.

My sense of things is that it would be cheaper to do this
via the internet rather than a direct long distance call
to download an export file from Winnepeg as I have been doing.

Any suggestions would be appreciated.

--
==
Jerome S. Schatten - Vancouver Community College

Internet: jerome_schatten@mindlink.bc.ca
Packet Radio: ve7ass@ve7kit.#vanc.bc.ca.na
==========

Date: Sun, 30 May 1993 11:26:11 GMT
From: dxis!k2ph@uunet.uu.net
Subject: XPCOM131.ZIP
To: packet-radio@ucsd.edu

Date: (null)
From: (null)
What does it do?

--
Bob Schreibmaier K2PH	UUCP: uunet!dxis!k2ph	Free the
(a.k.a. "The QRPer")	INTERNET: k2ph@dxis.monroe.pa.us	Intel
Kresgeville, PA	ICBM: 40o55'N 75o30'W	486

End of Packet-Radio Digest V93 #151
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